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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,096	10/10/2003	Rodney R. Wilkins	NFIBX 120	5497
2555	7590	11/28/2005	EXAMINER	
KREMBLAS, FOSTER, PHILLIPS & POLLICK 7632 SLATE RIDGE BOULEVARD REYNOLDSBURG, OH 43068			COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/685,096	<b>Applicant(s)</b> WILKINS; RODNEY R.	
	<b>Examiner</b> Elizabeth M. Cole	<b>Art Unit</b> 1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/12/05 has been entered.

2. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not describe that the glass fibers in the mat have an engineered, non-random orientation. The portions of the specification cited as well as the US patent documents incorporated by reference disclose particular structures, but do not disclose "a non-random orientation" but instead describe a particular way the continuous glass fibers are oriented, not just "not random". The recitation of "not random" is much broader than what is described by the specification including the US patent documents which are incorporated by reference. The specification describes various configurations and these configurations can be claimed, but the specification does not describe generally "not random".

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 10, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Wahl et al, U.S. Patent No. 4,931,358. Wahl discloses a material consisting of a needled material wherein the material may comprise layers A and B. Layer A may comprise continuous glass fibers which are oriented in a parallel direction, (see col. 1, lines 63- 67; col. 2, line 25) and layer B comprises unoriented fibers such as random continuous filament or staple fiber mats or nonwovens, (col. 2, lines 8-11). Layer B may comprise either glass fibers or may comprise thermoplastic fibers, (see col. 2, lines 25-29). The fiber layers may be arranged as ABAB; ABABAB and ABABABAB. (Col. 2, lines 37-39). The fiber layers are needled together. See col. 2, lines 41-42. The needled fabric can subjected to heat and pressure in a mold. See example 1. With regard to the new limitation that only thermoplastic material in the mat is thermoplastic fibers, while Wahl teaches that the formed mat may be impregnated with a thermoplastic material, Wahl does not require it and teaches the formation of the product without additional thermoplastic materials. See claims of Wahl.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wahl et al, U.S. Patent No. 4,931,358 in view of Fourezon et al, U.S. Patent No. 5,667,882. Wahl discloses a material consisting of a needled material wherein the material may comprise layers A and B. Layer A may comprise continuous glass fibers which are oriented in a parallel direction; (see col. 1, lines 63- 67; col. 2, line 25) and layer B comprises unoriented fibers such as random continuous filament or staple fiber mats or nonwovens, (col. 2, lines 8-11). Layer B may comprise either glass fibers or may comprise thermoplastic fibers, (see col. 2, lines 25-29). The fiber layers may be arranged as ABAB; ABABAB and ABABABAB. (Col. 2, lines 37-39). The fiber layers are needled together. See col. 2, lines 41-42. The needled fabric can subjected to heat and pressure in a mold. See example 1. Wahl differs from the claimed invention because Wahl does not specifically disclose employing polypropylene fibers in layer B. Fourezon discloses a that carded staple fibers such as polypropylene fibers can be employed as the thermoplastic fibers which are used to form needled structures with continuous glass fiber layers. It would have been obvious to have employed polypropylene fibers as taught by Fourezon in the structure of Wahl. One of ordinary skill in the art would have been motivated to employ polypropylene because Fourezon teaches that such fibers are useful in forming needled multi layered structures which can be used as reinforcements in composite materials.

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7. Applicant's arguments filed 9/12/05 have been fully considered but they are not persuasive. Applicant argues that the structure in Wahl comprises a layer of molten thermoplastic resin. However, while Wahl teaches that it is preferred that the semi-finished fabric be impregnated with resin, Wahl does not require or claim this step.

8. Applicant argues that it would not have been obvious to have combined the teachings of Wahl and Fourezon because Wahl teaches an additional layer besides the fibers while Fourezon teaches random glass fibers. However, as set forth above, Wahl does not require additional layers of resin. Further, even if Wahl did require such layers it would not teach away from using polypropylene fibers. With regard to Fourezon, Fourezon is relied on to show that polypropylene fibers were known to be useful in similar structures. Wahl already teaches using the glass fibers in a particular configuration. In response to applicant's argument that Fourezon teaches random glass fibers, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

9. With regard to the new matter rejection, the rejection is maintained with the regard to the claims as amended since not oriented is basically the same as non-oriented. Applicant argues that by disclosing a fabric having a particular orientation of

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fibers that Applicant has support for the limitation of not oriented. However, not-oriented is much broader than the particular configurations set forth in the specification and encompasses any and all configurations of fibers. Therefore, the rejection is maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c